

Phyllitis zosteraefolia Reinke. Magnolia, Mass., Miss C. E. Clarke; also at Newfoundland.

Phyllophora rubens (Good. & Wood.) Grey. Newport, R. I., Mrs. W. C. Simmons. Only a single specimen, and that doubtful; not otherwise known in America; should be carefully looked for.

Polysiphonia vestita J. Ag. Martha's Vineyard, Miss Laura Jerne-gan. Only a few plants.

Porphyra coccinea, J. Ag. Hampton Beach, N. H., F. S. Collins. A single frond of *Desmarestia aculeata*, washed ashore, covered with the *Porphyra*; not otherwise known in America.

Scaphospora Kingii Farlow. Edgartown, J. D. King.

Sorocarpus uvaeformis Prings. Martha's Vineyard, Miss Colt.

Ulothrix collabens (Ag.) Thuret. Nahant and Swampscott, F. S. Collins.

The writer would be very glad to receive specimens of any of these species from localities other than those named, or, in the case of the rarer ones, from the same localities; and, in general, any species new to our limits, or from points beyond the previous range. As far as practicable, he will be pleased to assist correspondents in determining doubtful forms, with the usual understanding that a specimen of each may be retained, if desired.

POLYEMBRYONY IN *OPUNTIA VULGARIS*. — A phenomenon of much scientific interest, though of no great frequency, is polyembryony or the production of more than one embryo from a single seed. It occurs in *Opuntia vulgaris*, as described and figured in the Botanical Gazette for April, 1898. The material used in that study was, however, from plants long grown in a botanic garden, and the polyembryony has not yet been observed in plants growing in a wild state. It is possible, though unlikely, that wild plants are not polyembryonic, and it is desirable that observations upon the point be made in the field. As the species occurs in New England, some of our botanists may have opportunity to study it this summer. If polyembryonic specimens are found, they should be preserved, preferably in a two per cent solution of formaline. The polyembryony shows itself in two ways: — first, in the production of two or more perfect embryos, one usually much larger than the others, from a single seed; and second, in single embryos composed of two or more variously united, thus showing

several cotyledons of diverse sizes and irregular positions. The earlier in the summer observations are made on the germinating seeds the better, since the smaller embryos are usually soon crowded out and killed by the growth of the larger. One may either observe the sprouting seeds growing naturally among the old plants, or gather ripe fruits and grow the seeds in pots the next spring. Similar observations upon *O. Rafinesquii* are desirable, especially as it is not known whether or not that species is polyembryonic at all. — W. F. GANONG, Smith College.

LIST OF VERMONT MYXOMYCETES WITH NOTES.

LUELLA C. WHITNEY.

THE following list of forty-six species is a complete catalogue of the Myxomycetes thus far found in Vermont. This group of plants was studied at Middlebury College by Miss F. M. Sutton and the writer, who took their material from the collections made by Dr. E. A. Burt of Middlebury College and Prof. L. R. Jones of the University of Vermont. Specimens of all but two are now in the College Herbarium.

Badhamia utricularis Berk., *B. magna* Pk., *B. macrocarpa* Rost.; *Physarum leucopus* Link, *P. viride* Pers., *P. murinum* List., *P. nutans* Pers., *P. didermoides* Rost., *P. cinereum* Pers., *P. bivalve* Pers., *P. contextum* Pers., *P. virescens* Ditm.; *Fuligo septica* Gmelin, *F. ochracea* Pk.; *Leocarpus vernicosus* Link; *Chondrioderma spumarioides* Rost., *C. globosum* Rost.; *Didymium farinaceum* Schrad.; *Spumaria alba* DC.; *Stemonitis fusca* Roth, *S. splendens* Rost., *S. ferruginea* Ehrenb., *S. Smithii* Macbr.; *Comatrichia typhoides* Rost.; *Lamproderma physaroides* Rost.; *Brefeldia maxima* Rost.; *Cribraria macrocarpa* Schrad.; *Tubulina fragiformis* Pers.; *Siphoptychium Casparyi* Rost.; *Enteridium Rozeanum* Wing.; *Trichia favoginea* Pers., *T. persimilis* Karst., *T. scabra* Rost., *T. varia* Pers., *T. contorta* Rost., *T. fallax* Pers.; *Hemitrichia rubiformis* Pers., *H. clavata* Pers., *H. Serpula* Pers.; *Arcyria ferruginea* Sauter, *A. albida* Pers., *A. punicea* Pers., *A. incarnata* Pers., *A. flava* Pers.; *Perichaena populina* Fr.; *Lycogala miniatum* Pers.

SIPHOPYCHUM CASPARYI Rost., which has hitherto been recorded for only two American stations, the Adirondacks and the White Mountains, was found growing profusely on a log near Lost Pleiad Pond. In this species the cylindrical sporangia are united to form an aethalium,